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FARMSTEAD WATER SUPPLY SYSTEM

COOPERATIVE FARM BUILDING
Plan No. 5963
(1 SHEET)
PLAN EXCHANGE

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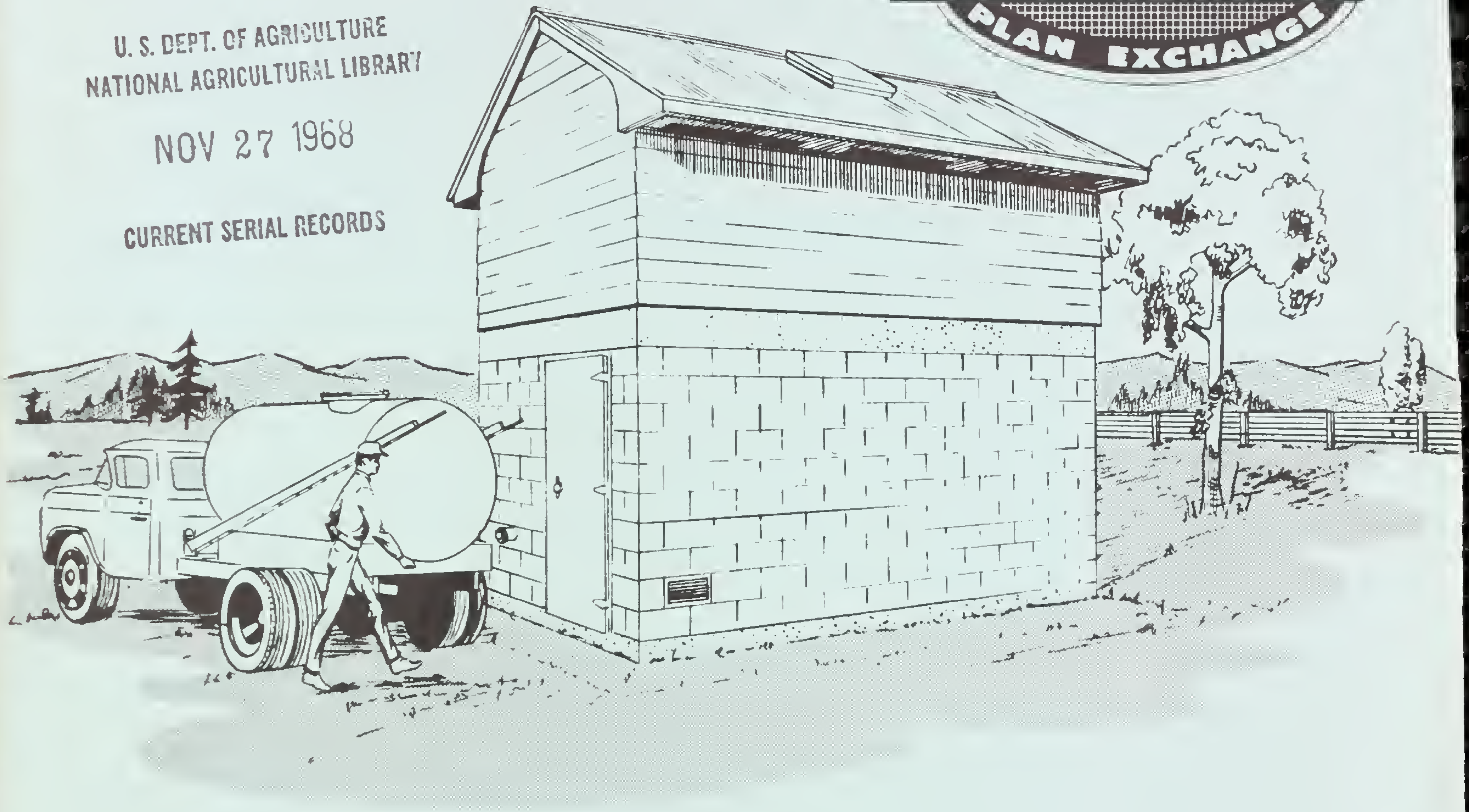

Every farmstead has a "peak demand" for water that its water supply system should be able to meet. The peak demand is the total supply needed to meet the various individual requirements that may occur simultaneously.

Assuming that the water supply adequately meets the total daily demand in a 24-hour period or less, but that the flow is insufficient at peak demand, then an intermediate water storage facility, such as is shown on this plan, may be a desirable investment.

Except for the source of the water supply and the pump and distribution lines, the entire water system is accommodated within the intermediate storage structure. This includes the water quality improvement equipment, a 2,000-gallon elevated steel tank for storing fresh water, a 5,000-gallon concrete storage tank for emergencies, and the distribution pump and hydropneumatic tank to provide pressure for the system. The storage tanks are not pressurized. The storage structure itself is of masonry and frame construction.

Site selection is important. The facility should be located on the highest ground available, at least 70 feet from any other building. The site should be well drained and not subject to flooding.

An all-weather lane to the facility will permit the approach of a tank truck or a fire truck.

Although 5,000 gallons of water is about the bare minimum reserve supply for firefighting, the reserve emergency storage tank could provide 500 gallons per minute for a period of 10 minutes. It is fitted with a dry fire hydrant that would permit the use of a rural fire department pumper when needed.

Complete working drawings may be obtained from the extension agricultural engineer at your State university. There may be a small charge to cover cost of printing.

If you do not know the location of your State university, send your request to Agricultural Engineer, Federal Extension Service, U.S. Department of Agriculture, Washington, D.C. 20250. He will forward your request to the correct university.

ORDER PLAN NO. 5963, FARMSTEAD WATER SUPPLY SYSTEM

Washington, D.C.

Issued October 1968

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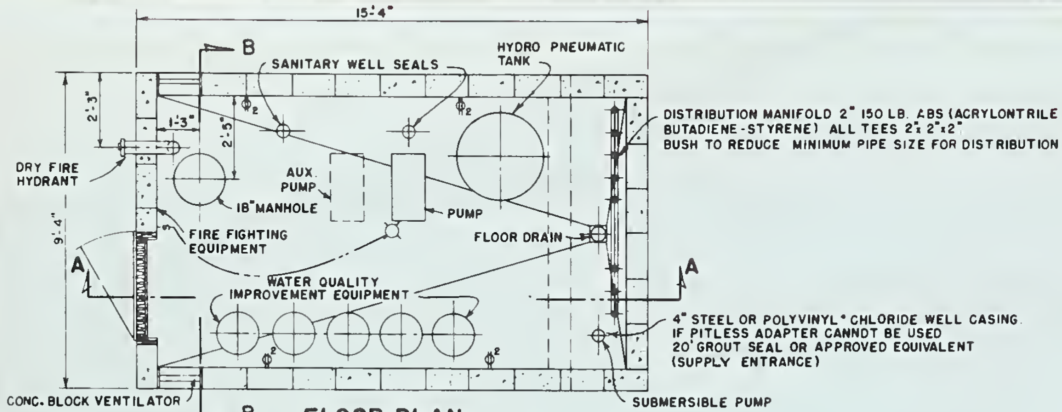
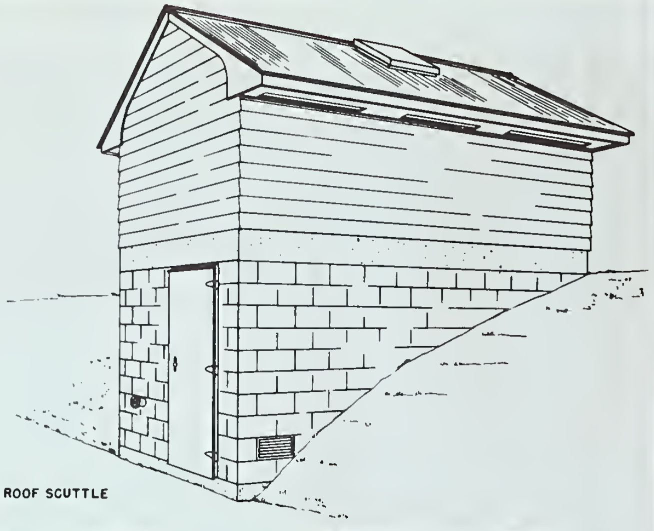
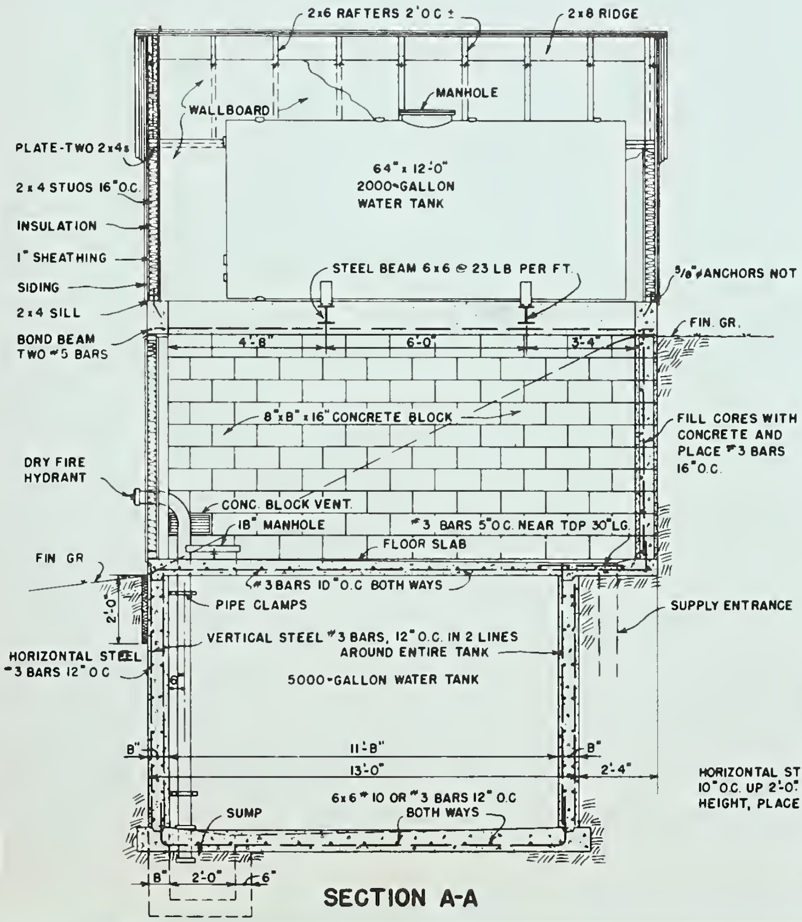

15'-4"
B
SANITARY WELL SEALS
HYDRO PNEUMATIC TANK
DISTRIBUTION MANIFOLD 2" 150 LB. ABS (ACRYLONTRILE BUTADIENE-STYRENE) ALL TEES 2" x 2" x 2"
BUSH TO REDUCE MINIMUM PIPE SIZE FOR DISTRIBUTION 1¼"
2'-3"
1'-3"
2'-5"
DRY FIRE HYDRANT
AUX. PUMP
18" MANHOLE
PUMP
9'-4"
FIRE FIGHTING EQUIPMENT
FLOOR DRAIN
A
A
WATER QUALITY IMPROVEMENT EQUIPMENT
4" STEEL OR POLYVINYL CHLORIDE WELL CASING.
IF PITLESS ADAPTER CANNOT BE USED
20' GROUT SEAL OR APPROVED EQUIVALENT
(SUPPLY ENTRANCE)
CONC. BLOCK VENTILATOR
B
SUBMERSIBLE PUMP

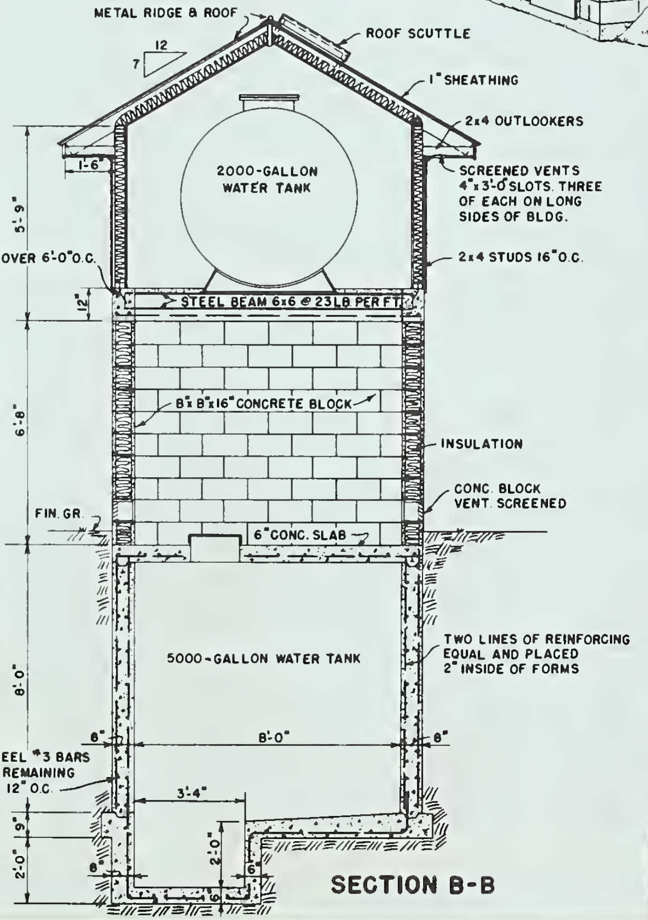
FLOOR PLAN



PERSPECTIVE VIEW



SECTION A-A


METAL RIDGE & ROOF
ROOF SCUTTLE
12
7
1" SHEATHING
2x4 OUTLOOKERS
1'-6"
2000-GALLON
WATER TANK
SCREENED VENTS 4" x 3'-0" SLOTS. THREE OF EACH ON LONG SIDES OF BLDG.
5'-9"
2x4 STUDS 16" O.C.
12"
STEEL BEAM 6x6 @ 23 LB PER FT.
8" x 8" x 16" CONCRETE BLOCK
6'-8"
INSULATION
CONC. BLOCK VENT. SCREENED
FIN. GR.
6" CONC. SLAB
5000-GALLON WATER TANK
TWO LINES OF REINFORCING EQUAL AND PLACED 2" INSIDE OF FORMS
8'-0"
6"
8'-0"
8"
HORIZONTAL STEEL #3 BARS 10" O.C. UP 2'-0". REMAINING HEIGHT, PLACE 12" O.C.
3'-4"
9"
2'-0"
2'-0"
6"
6"
6"

SECTION B-B

NOTES:

CHECK INSURANCE REGULATIONS FOR WATER STORAGE REQUIREMENTS.

PROVIDE GROUNDED DOUBLE CONVENIENCE OUTLETS.

WALLS AND ROOF OF BUILDING TO BE INSULATED IN LOCALITIES SUBJECT TO FREEZING TEMPERATURES.

EQUIP WITH ADEQUATE LIGHTNING PROTECTION SYSTEM IN AREAS WHERE NEEDED.

FARMSTEAD WATER SUPPLY SYSTEM			
USDA	'63	EX. 5963	SHEET 1 OF 1

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